Health Status Survey Brief

Chronic Medical Conditions

Life expectancy has increased dramatically over the past century, primarily as a result of a decrease in deaths due to infectious illness. At the same time, deaths due to chronic medical conditions have increased. Chronic medical conditions contribute to disability, diminish quality of life, and increase health and long-term care costs.¹ This brief will explore the prevalence of four chronic conditions in Utah as measured by the 2003 Utah Health Status Survey (HSS), as well as how two factors, obesity and secondhand tobacco smoke, are associated with those conditions.

Background

In 2003 the Utah Health Status Survey measured the prevalence of four chronic conditions in the state of Utah: arthritis, asthma, diabetes, and chronic obstructive pulmonary disease (COPD). Twenty-two percent of Utahns (all ages) had at least one of these four chronic medical conditions. Of those Utahns, 15.9% had more than one chronic condition.

Diabetes

Diabetes, a growing health problem in the U.S. and Utah, is not a single disease but a variety of disorders that result from high blood glucose levels. It is a chronic, lifetime condition with no cure and potentially devastating complications including blindness, heart disease, stroke, and end-stage renal disease. It is the leading cause of non-traumatic lower extremity amputations.² There are two types of diabetes: type 1, which occurs when the pancreas produces too little insulin, and type 2, which results from the body's inability to use insulin.

Diabetes prevalence was measured by the HSS with three questions.

"Has a medical DOCTOR or other health professional ever told anyone currently living in your household that they have ANY KIND OF DIABETES?"

Respondents who answered, "yes," were then asked: "Please tell me which household members have been told by a doctor that they have diabetes ..." A third question was asked of women to assess gestational diabetes:

"Did [name's] diabetes occur only during pregnancy, or has she also been diagnosed with diabetes while not pregnant?"

Results from the HSS show that approximately 87,000 or 3.7% of all Utahns had some kind of diabetes. For women diagnosed with diabetes, 21% had diabetes only when they were pregnant (gestational diabetes). Figure 1 illustrates the increased prevalence of diabetes as age increased. Utahns with diabetes were also more likely to report that their general health was "fair or poor" than those without diabetes (47% and 6.9% respectively).



Arthritis

Arthritis is not a single disease, but a combination of over 100 different disorders and diseases. Osteoarthritis is the most common type of arthritis. Increased age, obesity, and physical inactivity are associated with increased arthritis risk.³

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Arthritis prevalence was measured by the HSS with two questions.

"Has anyone living in your household ever been told by a doctor that they have some form of ARTHRITIS, Rheumatoid Arthritis, gout, lupus, or fibromyalgia?"

Respondents who answered, "yes," were then asked: "Please tell me which household members have ever been told by a doctor that they have some form of arthritis ..."

Results from the HSS showed that 12.0% (282,000) of all Utahns had some kind of arthritis. Women (14.9%) were significantly more likely than men (9.0%), and children 17 years and under were the least likely to be diagnosed with arthritis (0.2%). Utahns 65 years and older had the highest rates of arthritis, with nearly 50% of the population being diagnosed (Figure 2). Utahns with arthritis were more likely to report that their general health was "fair or poor" than those without arthritis (29.4% and 5.5% respectively).



Obesity Comorbidity With Diabetes and Arthritis Obesity is a growing problem in the U.S. and Utah. Currently, one in five Americans is obese.⁴ Trends in obesity prevalence in Utah as measured by the HSS show significant increases in the proportion of obese adults, with a prevalence of 7% in 1986 to 18.4% in 2003.

Obese individuals are more likely to suffer from a number of medical conditions. In one study, obese individuals of the same age and sex and having similar socio-demographic backgrounds were more likely to suffer from chronic medical conditions than their normal-weight counterparts by 67%.⁴

Of the estimated 84,400 Utah adults with diabetes, 45.4% were also obese. The association between diabetes and obesity increased with age (Figure 3). For each age group, those who were also obese had a statistically higher chance of having diabetes.



There was also a strong association between arthritis and obesity, especially as age increased. Of the estimated 280,800 Utah adults with arthritis, 28.8% were also obese (Figure 4). In each age group, arthritis prevalence was higher for Utahns who were obese.



COPD and Asthma

Over 20.3 million Americans have asthma, and an estimated 24 million have been diagnosed with COPD. Both are respiratory illnesses that include airflow blockage and breathing related problems. Asthma is associated with wheezing, breathlessness, chest tightness, and nighttime or early morning coughing and is more common among children. COPD refers to a group of diseases that cause airflow blockage and includes emphysema, chronic bronchitis, and in some cases, asthma and typically affects people in their later years.⁵⁻⁶

Asthma prevalence was measured by the HSS with two questions.

"Has anyone currently living in your household ever been told by a doctor, nurse, or other health professional that they had ASTHMA?"

Respondents who answered, "yes," were then asked: "I need to list all household members who have ever been told that they had asthma starting with the oldest ..."

In 2003, an estimated 9.8% of Utahns had been diagnosed with asthma (229,600 people). Females were more likely than males to have been diagnosed with asthma (11.1% vs. 8.4% respectively) (Figure 5).



COPD prevalence was measured by the HSS with two questions.

"Is anyone living in your household currently under medical care for CHRONIC OBSTRUCTIVE PUL-MONARY DISEASE, such as CHRONIC BRON-CHITIS or EMPHYSEMA?"

Respondents who answered, "yes," were then asked: "I need to list all household members under medical care for obstructive pulmonary disease starting with the oldest ..."

According to the 2003 HSS, an estimated 16,600 Utahns (0.7%) had been diagnosed with COPD. Males were slightly more likely to be diagnosed with COPD than females (0.8% vs. 0.6%). COPD prevalence increased with age (Figure 6). However, numerous studies have shown that the rate of increase in diagnoses of COPD for women is much faster than men's.⁵



With regard to general health status, among those diagnosed with asthma, 17.3% had fair or poor health compared to 7.3% of others. Utahns who had been diagnosed with COPD were over seven times more likely to report fair or poor health (61.3%), compared to those who had not been diagnosed with COPD (8%).

Secondhand Tobacco Smoke, COPD, and Asthma Although symptoms are mediated by genetic factors, persons with asthma or COPD experience aggravat-

persons with asthma or COPD experience aggravated symptoms with exposure to environmental pollutants such as tobacco smoke and other air pollutants.

According to the 2003 HSS, the following groups were exposed to secondhand tobacco smoke in their homes.

- 6.0% of Utahns overall
- 4.3% of children 17 years and under
- 11.1% of Utahns diagnosed with asthma (all ages)
- 1.4% of Utahns with COPD
- 6.1% of Utah children with asthma

Conclusions

As the population ages, chronic medical conditions will affect an increasing number of Utahns. Public health activities such as promotion of proper nutrition, adequate physical activity, and tobacco abstinence will influence prevalence and age of onset for many chronic diseases. Quality of life can be further improved through prompt diagnosis and treatment, including both lifestyle, pharmaceutical and other interventions.



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The Utah Health Status Survey (HSS), conducted on a ongoing basis by the Utah Department of Health, is representative of noninstitutionalized adults and children living in Utah households with telephones. It includes information on a variety of topics, including physical and mental health status, health insurance coverage, and access to care. The HSS was conducted with 3,175 households (9,958 persons) in 2003. Prior to analysis, HSS data are weighted so that the findings can be generalized to the general Utah population. The Utah Department of Health would like to thank the citizens of Utah who have participated in this survey.

For more information about the Utah Health Status Survey, please contact the HSS Coordinator at the Utah Department of Health at (801) 538-9947. You many also visit the Utah Department of Health's website, at: http://ibis.health.utah.gov.